### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014743 Address: 333 Burma Road **Date Inspected:** 31-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Tu Jun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: Tower Components** 

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

#### BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 2A located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 16. Welder is identified as 050289. ZPMC Quality Control (QC) Inspector is identified as Tu Jun. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 1B located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 19. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Tu Jun. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Flux cored Arc Welding (FCAW):

Weld joint #83 located on Shear Plate ED1 – A27B/E. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2331 - Tc - P4 - F.

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Weld joint #70 located on Shear Plate ED1 – A27B/E. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2331 - Tc - P4 - F.

**BAY#11** 

This QA Inspector observed the following work in progress Shielded Metal Arc Welding (SMAW):

Weld joint # 1A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 2. Welder is identified as 044551. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1. (See attached photo)

## Submerged Arc Welding (SAW):

Weld joint # 6B located on Grillage Top Plate GTSA5 – B/G. Welder is identified as 044550. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2221 - B - U3c - S - 2. (See attached photo)

Weld joint # 3B located on Grillage Top Plate GTSA5 – B/G. Welder is identified as 042195. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2221 - B - U3c - S - 2.

#### MEASUREMENTS ON VERTICAL TRIAL ASSEMBLY EAST TOWER LIFT-1

This QA Inspector carried out the measurements on East Tower Lift-1 Exterior side to check the distance from the edge of the base plate anchor bolt holes to the side of the type-2 bearing stiffeners for skin'A'; 'B'; 'C'; 'E'. Measurements were recorded on the data sheet and submitted to the assigned task leader.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

No Relevant Conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer